105503 Work Order ID 105503

August-07-13 2:24:16 PM

Item ID: Revision ID: Item Name:	D2936-3 Lug			Accept	*N900	0401 0	ገበ* ፡	Setup Star Stop	I VI	S1* S2*
Start Date: Required Date: Reference:		Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item I Customer:	D:			IV.	
Approvals:	Process Plan: QC:	MUS	Date: \(\frac{7}{08} - \circ \)	Tooling: SPC (Y/N):	1	ate:	<u>-</u> 	Run Star Stop		R1* R2*
Sequence ID/ Work Center II Draw Nbr)	Operation Description on Nbr		Set Up/ Run Hours	Tool ID	Tool # Pla		Reject Qty	Reject Number	Insp. Stamp
D2936	Rev A									
*100 *100* Bandsaw Jeaspa Bandsaw		BAND SAW Memo Cut blanks 2	2.300" long	0.00	DR/D 13/08/	·A 107	4			
110 *110* HAAS 1 HAAS CNC vertical		IAAS CNC VERTICAI Memo Machine per	. MACHINING #1 r folio FA019	0.00 MH 0.00 13/0	08/08		8			_
120 *120* QC Quality Control	-ç	PC2- Inspect parts off m Memo	achine FAI/FAIB	0.00 MH	13/08/0	8	-8	. 		3

							DQA:	Date:	g 71 78
NCR: Ye	s / No			WORK ORDER NON-	CONFORI	QA Closed:	Date:		
Work Order	•			DEPARTMENT	/PROCESS				
Part No	Part No. Skid-tube Cross Part No. Scrap Machining Sma Use-as-is Thermoforming Fini NCR No. Work Order Update Large Fab Comp							Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Description of work order update	Initial	Action	Sign &		
Cause	Date	Step	Qty	or Non-conformance	Chief Eng	Description	Date	Verification	QC Inspector
Doc/Data Equip/Tooling									
Operator	7	ł						,	
Material		1]		
Setup							1		
Other	7			1	ı	1			

FAULT CATEGORY Landing Gear General Bend Grain Ovalized Pressure/Forced Bending BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Broken/Damaged Weld Inspection Incomplete Part Incorrect Cracks Crushed/Crimped Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Burrs Cuffs Maintenance Part Moved Contamination Positioned Wrong **Heat Treat** Countersink Mislabeled Misread Power Loss/Surge Other Inspection Strip in Tube Cut Too Short Drill Holes Ripples in Bend Offset Out of Calibration Torque Waves in Extrusion Drawing Turning Sequence Finish Out of Sequence Folio Wave/Twist in Tube Outside Dimensions

Process
Supplier
Training
Unapproved

Page 2 August-07-13 2:24:16 PM Item ID: D2936-3 Accept *N900040100* Setup Start Revision ID: Item Name: Lug Start Date: Start Qty: 4.00 *4* 8/07/13 Cust Item ID: Required Date: 8/14/13 Req'd Qty: 4.00 *4* **Customer:** Reference: Run Approvals: **Process Plan:** Date: Tooling: Date: QC: Date: __ SPC (Y/N): Date:__ Sequence ID/ Operation Set Up/ Tool ID Accept Reject Tool # Plan Reject Insp. Work Center ID Description Run Hours Qty Code Qty Number Stamp 130 QC8- Inspect parts - second check 0.00 *130* QC 0.00 Memo Quality Control 140 0.00 \$mall Fab *140* Small Fab 0.00 Memo Small Fab rumble and depurr any rough edges aftentumbling 150 QC5- Inspect part completeness to step on W/C 0.00 *150* Memo Quality Control

NCR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE													
											QA Closed:	Date	:
Work Orde	er:					DISPOSITION				AGAINST DE	PARTMENT,		1
Part N						Rework Scrap Use-as-is Work Order Update	Machining Small Fab Prod. Eng. Coor. Thermoforming Finishing Rec/Store/Packaging						Engineering Quality Other
Root					Descri	ption of work order update	ln	itial	Acti	on	Sign &		
Cause	D	ate	Step	Qty	(or Non-conformance	Chie	f Eng	Descri	iption	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling							ļ						
Operator		İ					ĺ						
Material													i
Setup													
Other							ŀ						1
Process													
Supplier		1					İ						
Training													
Unapproved							<u> </u>						
						F/	AULT	CATE	GORY				
Landi	ng Gear					General					,	_	-
	Ben	ding				Bend	Ш	Grain		<u> </u>	Ovalized	L	Pressure/Forced
	Cen	tre No	t Concer	ntric to (o/s	BOM/Route	Ц٢	lardwa	re		Over/Under	tolerance	Temperature/Cure
	Cra	cks				Broken/Damaged	<u> </u>	nspecti	on Incomplete	<u> </u>	Part Incorred	t L	Weld
	Cru	shed/C	rimped		<u> </u>	Burrs		nstruct	ions Incomplete/U	nclear	Part Lost/Mis	ssing	Wrong Stock Pulled
	Cuffs Contamination						\square	/lainte	nance		Part Moved		
	Heat Treat Countersink							/lisłabe	eled		Positioned W		_
Inspection Strip in Tube Cut Too Short						Cut Too Short		/lisreac	ł		Power Loss/S	Surge	Other
	Ripples in Bend Drill Holes						Щ	Offset					
Torque Waves in Extrusion Drawing						Drawing	\Box	ot of O	Calibration				
	Tur	ning Se	equence			Finish		Out of S	Sequence				

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ordensus 1971-13 2		5503		*105503*							Page 3
Item ID: Revision ID: Item Name:	D2936-3 Lug			*N900040100* Set							S1* S2*
Start Date: Required Date: Reference:	8/07/13 8/14/13	Start Qty: 4.00 Req'd Qty: 4.00	*4 [:]		Cust Item ID Customer:) :					
Approvals:	Process Plai	n:	Date:	Tooling: _ SPC (Y/N):					Run Star Stop	1/1	R1* R2*
Sequence ID/ Work Center II 160 *160* Packaging Packaging	D	Operation Description Identify as per dwg & St Memo	ock Location: W	Set Up/ Run Hours 0.00	Tool ID		Plan Code	Accep Qty	t Reject Qty	Reject Number	Insp. Stamp 13.08.12
170 *170* QC Quality Control		QC21- Final Inspection - Memo	Work Order Release	0.00			(-M	-	1 <u>-08-</u> 13	١٧

NCR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE														
											QA Closed:		ate:	
Work Orde	er.					DISPOSITION			AGAINS	T DE	PARTMENT	/PROCESS		
Part I	Part No					Rework Scrap Use-as-is Work Order Update	† Therm	Skid-tube Crosstube Machining Small Fal noforming Finishin Large Fab Composite	b g	4	Water Je d. Eng. Coo re/Packagin Supplie	r g	Engineering Quality Quality	
Root Cause		Date	Step	Qty		tion of work order update or Non-conformance	1	Initial nief Eng	Action Description		Sign & Date	Verificati	on	QC Inspector
Doc/Data	\sqcap	Date	эсер	4.,		or troit comormance	+		0000.1011011		 			Дом
Equip/Tooling	H							-						
Operator	Н		ļ											
Material	П						1							
Setup	П													
Other	П							ļ				1		
Process	П							1						
Supplier											1 '			
Training					·		ļ					1		
Unapproved				<u> </u>					· - · - · - · - · - · - · - · - · -				_	
				_		F	AUL	LT CATE	GORY					
Landi	ng G	ear			_	General	_	-			7			1
	$\boldsymbol{m{}}$	Bending			_	Bend	_	Grain		\vdash	Ovalized		_	Pressure/Forced
	${m H}$	Centre No	ot Conce	ntric to	o/s	BOM/Route	_	Hardwa			Over/Under		-	Temperature/Cure
	Н	Cracks			· _	Broken/Damaged	\vdash	⊣	on Incomplete	\vdash	Part Incorre		<u> </u>	Weld
	\vdash	Crushed/	Crimped		<u> </u>	Burrs	\vdash	-	ions Incomplete/Unclear	\perp	Part Lost/Mi	issing		Wrong Stock Pulled
1		Cuffs			<u> </u>	Contamination	\vdash	Mainte		\vdash	Part Moved			
	$\boldsymbol{\vdash}$	Heat Trea			<u> </u>	Countersink	<u> </u>	Mislabe		-	Positioned V	=	_	الما
	-	Inspectio		Tube	 -	Cut Too Short	\vdash	Misread			Power Loss/	Surge		Other
	-	Ripples ir		_	 	Drill Holes	-	Offset	- III					
	Ιl	Torque V	vaves in E	xtrusio	n	Drawing	1	Out of C	alibration					

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

CRAINCRING

Jugust-07-13 2:24.26 PM

Work Order ID: 105503

Parent Item: D2936-3

Parent Item Name: Lug

105503

D2936-3

Start Date: 8/07/13

Required Date: 8/14/13

Start Qty: 4.00

Required Qtv: 4.00

Comments:

IPP

B00.05.19Added inspect level 8EC

Component Item ID/ Item Name	Replacement Item 1D	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	– Total Qty	Qty Issued	: Date Issued	Status
M6061T6B1.250X01.25	_ 	Purchased	No		· - _		<u>_</u>	 22.4921		0.631579	. –	- 7	-· ·- •
M6061T6	R1 250	X01 25	in						**	NO/A	<u>~</u>	12/09	2/07

6061-T6 Bar 1.25 x 1.25

.631

DQA:	Date:	1	*	3

ICR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

NCR: Y	es / No				WORK ORDER NON-	CONFOR	VIAINCE / OF		QA Closed:	Date	· :		
Work Orde	· ·			-	DISPOSITION			AGAINST DE	PARTMENT	/PROCESS			
Part N					Rework Scrap								
NCR N	lo				Use-as-is Work Order Update								
Root				Descri	ption of work order update	Initial		tion	Sign &				
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector		
Doc/Data	_										:		
quip/Tooling													
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Material	_] [
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Other	_												
rocess	_]								1			
upplier]										
raining	\dashv										İ		
Inapproved		L	<u>1, 1</u>			AULT CATE	GORY			<u> </u>			
Landin	ng Gear				General	ACC CATE							
[Bending				Bend	Grain			Ovalized	[Pressure/Forced		
ŀ	Centre No	at Concer	ntric to C		BOM/Route	Hardwa	are		Over/Under	tolerance	Temperature/Cure		
1	Cracks				Broken/Damaged	$\boldsymbol{\vdash}$	ion Incomplete		Part Incorre	 	Weld		
ŀ	Crushed/	Crimped			Burrs	—	tions Incomplete/	/Unclear	Part Lost/Mi	issing	Wrong Stock Pulled		
İ	Cuffs	·			Contamination	Mainte	enance		Part Moved				
Ì	Heat Trea	at			Countersink	Mislab	eled	<u> </u>	Positioned V	V rong			
	Inspectio		Tube		Cut Too Short	Misrea	d		Power Loss/	'Surge	Other		
Ì	Ripples in	Bend			Drill Holes	Offset							
ľ	Torque M	/aves in E	xtrusion	,	Drawing	Out of	Calibration						
ľ	Turning S				Finish	Out of	Sequence						
	Wave/Tw	ist in Tul	эe		Folio	Outside	e Dimensions						

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DART AEROSPACE LTD	Work Order:	5022U
Description: Lug	Part Number:	D2936-3
Inspection Dwg: D2936 Rev: A		Page 1 of 1

spection Dwg:	: D2936 Rev :	: A				<u> </u>	age 1 of 1
	FIRST	ΓARTICLE II	NSPEÇTI	ON CHE	ECKLIST		
	х	First Arti	cle	Prot	otype		
Drawing		Actual			Method of		·
Dimension	Tolerance	Dimension	Accept	Reject	Inspection	C	omments
0.400	+/-0.010	, 400			M4-04	Cali	per
0.125	+/-0.010	:12-85		<u> </u>			1
0.530	+/-0.010	-529	1				
Ø0.257	+0.005/-0.000	·7 <u>28</u>	J		1-		1
R0.400	+/-0.010	R-4	J		fact goage	~	
					MH-04	Cal:	per
0.78	+/-0.030	<u> ٦</u> ٦٩	1		1	<u> </u>	
0.93	+/-0.030	.424.	J				
0.530	+/-0.010	5282					
0.125	+/-0.010	-124	V	_		- 1	
R0.125	+/-0.010	-125			radg wase		_
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							<u> </u>
						-	
asured by:	H/sul	Audited by:			Prototype Ap	proval:	N/A
Date:	3/08/08	Date:	13.0	2.14		Date:	N/A

	 _			
Rev	Date	Change	 Revised by	Approxed
Α	04.12.02	New Issue	KJ/JLM	211
	_		 	

										DQA:	Date:	
NCR: Ye	s / No				WORK ORDER NON-C	CON	IFORN	MANCE / UP	DATE	QA Closed:	Date:	
Work Order:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part No NCR No	•	-			Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
NCK NO	·				work order opdate	'		Large rab	composite_	<u></u>		
Root				Descri	ption of work order update	lr	nitial	Act	tion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chi	ef Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data												ı
Equip/Tooling	1									ļ		
Operator	1	ł										
Material											1	
Setup	1	1										
Other	7]	
Process	7									1		!

FAULT CATEGORY Landing Gear General Bend Grain Ovalized Pressure/Forced Bending Temperature/Cure Centre Not Concentric to O/S BOM/Route Hardware Over/Under tolerance Weld Cracks Broken/Damaged Inspection Incomplete Part Incorrect Part Lost/Missing Wrong Stock Pulled Instructions Incomplete/Unclear Crushed/Crimped Burrs Part Moved Contamination Cuffs Maintenance Positioned Wrong Heat Treat Countersink Mislabeled Other Misread Power Loss/Surge Inspection Strip in Tube Cut Too Short Ripples in Bend Drill Holes Offset Out of Calibration Torque Waves in Extrusion Drawing Out of Sequence Finish Turning Sequence

Outside Dimensions

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Wave/Twist in Tube

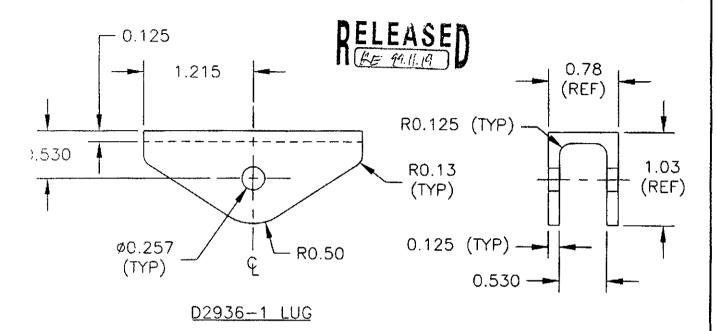
Folio

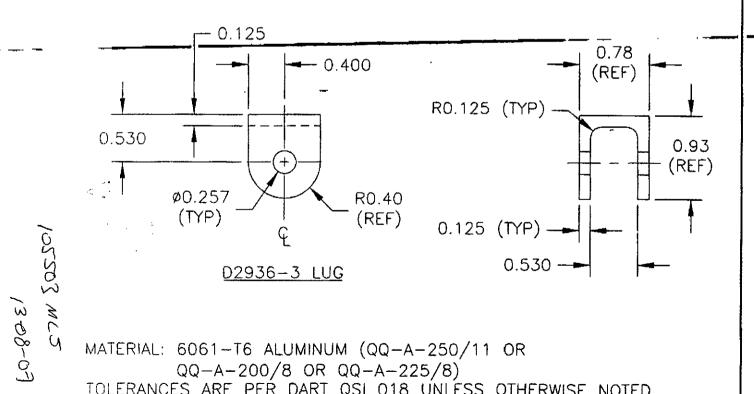
Supplier Training Unapproved





DESIGN	DRAWN BY	DART AEROSI HAWKESBURY, ONTA	
CHECKED	APAROVEO	DRAWING NO. D2936	REV. A SHEET 1 OF 1
DATE		TITLE	SCALE
99.11.02		LUG	1:1
Α	99.11.02	NEW ISSUE	





MATERIAL: 6061-T6 ALUMINUM (QQ-A-250/11 OR

QQ-A-200/8 OR QQ-A-225/8)

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

				DQA:	Date:
NCR: Ye	es /	No	WORK ORDER NON-CONFORMANCE / UPDATE		

										QA Closed:	Date	2:
Work Order:						DISPOSITION		AGAINST DEPARTMENT/PROCESS				
Part No						Rework Scrap Use-as-is Work Order Update	The	Skid-tube Machining rmoforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root	Descr				Descri	ption of work order update	Initial	Α	Action	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Chief Er	ng Des	scription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling	\Box					·					İ	·
Operator											1	
Material												
Setup				ļ								
Other				İ			İ					
Process			İ								,	
Supplier			*.							1	·	*
Training	aining		i	.					•			
Unapproved	approved							<u> </u>				
	FAULT CATEGORY											
Landi	ng G	ear				General	_		_	_		·
	Bending Be					Bend	Grain	Grain		Ovalized		Pressure/Forced
	Centre Not Concentric to O/S			ntric to	o/s	BOM/Route	Hard	Hardware		Over/Under tolerance		Temperature/Cure
	Cracks					Broken/Damaged	\mathbf{H}	Inspection Incomplete		Part Incorre	<u> </u>	Weld
	Crushed/Crimped				_	Burrs	⊢ ——	Instructions Incomplete/Unclear		Part Lost/Missing		Wrong Stock Pulled
•	Cuffs				Ĺ	Contamination	\vdash	Maintenance		Part Moved		
	Ш	Heat Treat				Countersink	Misla	Mislabeled		Positioned Wrong		_
	Inspection Strip in Tube			Tube	_	Cut Too Short	Misre	Misread		Power Loss/	Surge	Other
	Ripples in Bend					Drill Holes	Offse	t				· · · · · · · · · · · · · · · · · · ·
	Torque Waves in Extrusion			Drawing	Out	of Calibration						
	Turning Sequence			L	Finish	Out	Out of Sequence					
	Maye/Twist in Tube			ĺ	Folio	Louis	de Nimensions					

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